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A POCKET TYPE HUMIDITY INDICATOR FOR USE IN FIRE PREVENTION AND CONTROL

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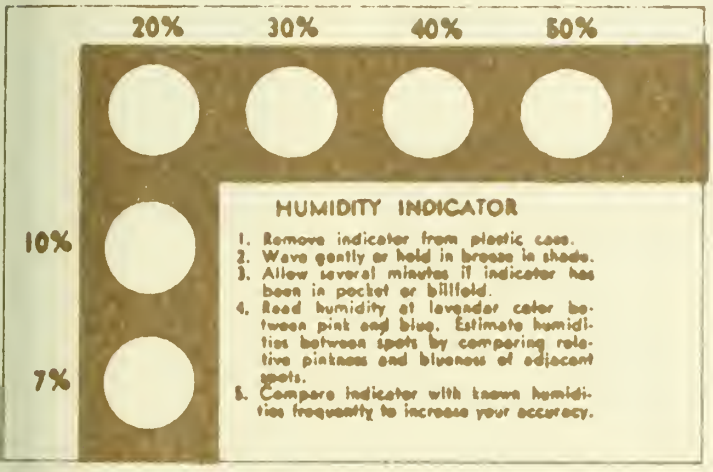
Humidity is often an indicator of the probability of fires starting and is an important element affecting the behavior of fires that do start. Knowledge of the relative humidity is thus important in both fire prevention and control activities. It is now possible to get a reasonably accurate estimate of relative humidity under field conditions with a pocket-sized humidity indicator designed by the Station's fire research staff.



Easy to handle and inexpensive, the indicator is in the form of a 2¼ by 3½-inch card. The card is carried in a transparent plastic case which protects it from excess moisture, dirt and grease.

Six spots on the card are treated with cobalt chloride solutions, differing in concentration for each spot. The spots change from pink to blue as humidity decreases and the reverse when it increases. The color changes are not abrupt, but shade gradually from intense blue or pink through lighter shades and mixtures of these two colors.

When the relative humidity corresponds with any one of the six values shown, the color of the corresponding spot is lavender. If the humidity is higher than that shown for a spot, the color will be on the pink side of lavender; if lower, it will be on the blue side.

Relative humidity can usually be estimated from the card within 5 to 10 percent of actual humidity without other aids. Precision can be increased by practice in reading the card and associating color variations with known humidities.

Information on sources of supply may be had from California Forest and Range Experiment Station. For those interested in procuring from their own local sources, specifications for preparation of the solutions may be had on request to the Station.

The California Forest and Range Experiment Station is maintained at Berkeley in cooperation with the University of California.

Agriculture--Berkeley